

Appln. No. 09/579,649
Amdt. dated October 29, 2003
Reply to Office Action of July 30, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) An apparatus comprising:
one or more stackable fiber optic transceivers, wherein each transceiver includes an electrical substrate having two sides with one or more electrical traces on each side terminated at an edge of the substrate; and wherein the electrical traces on the substrate align with one or more traces at predetermined positions on a motherboard, wherein the predetermined position of each trace on the motherboard is sufficiently close to a corresponding trace on the electrical substrate so that melted solder on one or more of the motherboard traces can wick up onto the substrate traces to form an electrical connection; and
one or more molded housings for retaining solder adjacent the traces on the electrical substrate; wherein the one or more molded housings are patterned with voids or pockets.
- 2-3. Canceled.
4. (Original) The apparatus of claim 1, wherein each electrical trace can carry data at a speed greater than 100MHz.
5. (Original) The apparatus of claim 1, wherein each electrical substrate is made of a material selected from the group consisting of ceramic and plastic.
6. (Original) The apparatus of claim 1, wherein the solder comprises a material selected from the group consisting of Pb-Sn, In-Sn, Cu-Ni, and Ag.
7. (Original) The apparatus of claim 1, wherein the solder is in the form of a solder paste.

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8. (Original) The apparatus of claim 1, wherein the solder is in the form of one or more solder balls.

9. (Original) The apparatus of claim 8, wherein the solder balls have a diameter of about 350 microns.

10. Canceled.

11. (Currently amended) The apparatus of claim ~~10~~ 1, wherein the molded housings hold solder on both sides of the electrical substrate.

12. (Currently amended) The apparatus of claim ~~10~~ 1, wherein the molded housing prevents cross connection between the electrical traces.

13. (Currently amended) The apparatus of claim ~~10~~ 1, wherein the molded housing has alignment features that conform to alignment features on the electrical substrate.

14. (Currently amended) The apparatus of claim ~~10~~ 1, wherein the molded housing comprises a material selected from the group consisting of ceramic, plastic, and metal.

15. Canceled.

16. (Currently amended) The apparatus of claim 1, wherein the solder protrudes outside of the one or more molded housing.

17. (Original) The apparatus of claim 1, wherein one or more of the electrical substrates have alignment features that conform to alignment features on the motherboard.

18-46. Canceled

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